

ABSTRACT

A Polynucleotide Motor, a Motor System, their
Preparation and Uses

5 A polynucleotide motor is disclosed, comprising an enzyme
capable of binding to a nucleic acid sequence, which
enzyme is also capable of translocating the nucleic acid
sequence without causing cleavage thereof. The motor may
be associated with a substance bound to the nucleic acid
10 sequence so that the bound substance, such as a magnetic
bead, biotin, streptavidin, a scintillant or the like,
can itself be translocated, relative to the region of
binding of the enzyme, during translocation. Such a
system has applications in the screening or testing for
15 a pre-determined biological, chemical or physical
activity; for example, in screening for new
pharmacologically-effective ligands.